

ABSTRACT

A distributed control system and methods of operating such a control system are disclosed. In one embodiment, the distributed control system is operated in a manner in which interrupts are at least temporarily inhibited from being processed to avoid excessive delays in the processing of non-interrupt tasks. In another embodiment, the distributed control system is operated in a manner in which tasks are queued based upon relative timing constraints that they have been assigned. In a further embodiment, application programs that are executed on the distributed control system are operated in accordance with high-level and/or low-level requirements allocated to resources of the distributed control system.